

A NEW SPECIES OF THE GENUS *EUCHORTHIPPUS* TARBINSKY FROM SHANDONG PROVINCE (ORTHOPTERA, ACRIDOIDEA, ARCYPTERIDAE)

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Abstract A new species of the genus *Euchorthippus* Tarbinsky, 1926, namely *E. shandongensis* sp. nov. from Shandong Province of China is described in this paper.

***Euchorthippus shandongensis* sp. nov.** (Figs 1–8)

The new species is similar to *Euchorthippus unicolor* (Ikonnikov, 1913), but differs from the latter in: fastigial foveolae longer, length 3.2 times width; frontal ridge below the median ocellus narrow, downward broaden distinctly; tegmina of male longer, extending over base of epiproct distinctly; subgenital plate of male shorter, length 1.5 times width in lateral view; arc of epiphallus deep, lower apex with acute

tuber on both side. The type specimens are deposited in College of Plant Protection, Shandong Agricultural University, Taian, China.

Holotype ♂, Kunyu Mountain, Shangdong (37°14'N, 121°46'E; alt. 230–923 m), 26 Sep. 2008. Paratypes: 4 ♂♂, 2 ♀♀, collected by XIAO Yun-Li, LI Xin-Jiang and YE Bao-Hua.

Length of body: ♂ 15.0–16.5 mm, ♀ 22.0–22.3 mm. Length of tegmen: ♂ 9.0–9.8 mm, ♀ 12.0–12.5 mm. Length of hind femur: ♂ 10.9–11.2 mm, ♀ 13.8–14.8 mm.

Etymology. The specific epithet is named for Shandong, the type locality,

Key words Orthoptera, Acridoidea, Arcypteridae, *Euchorthippus*, new species, China.

山东省异爪蝗属一新种 (直翅目, 蝗总科, 网翅蝗科)

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摘要 记述采自中国山东省网翅蝗科异爪蝗属 *Euchorthippus* Tarbinsky, 1926 1 新种, 山东异爪蝗 *Euchorthippus shandongensis* sp. nov.。新种同素色异爪蝗 *Euchorthippus unicolor* (Ikonnikov, 1913) 近似, 其区别特征为: 头侧窝较长, 长为宽的 3.2 倍; 颜面隆起明显, 具纵沟, 中眼之下缩狭, 往下明显宽大; 雄性前翅较长, 明显超过肛上板基部; 雄性下生殖板较短, 侧面观长为宽的 1.5 倍; 阳茎基背片弓形深, 两侧下端具尖突。模式标本保存于山东农业大学植保学院。

关键词 直翅目, 蝗总科, 网翅蝗科, 异爪蝗属, 新种, 中国。

中图分类号 Q969.265.1

异爪蝗属 *Euchorthippus* 于 1926 年由 Tarbinsky 建立, 属网翅蝗科、网翅蝗亚科, 迄今为止, 全世界已知 30 种, 其中 20 种分布在中国 [Fischer-Waldheim, 1846; Ikonnikov, 1913; Tarbinsky, 1925; Chang, 1937; Tu *et al.*, 1964; Cheng *et al.*, 1965; Zheng, 1980a; Zheng, 1980b; Jin *et al.*, 1983; Zhang *et al.*, 1985; Zheng, 1986; Bi *et al.*, 1987; Zhang *et al.*, 1992a; Zhang *et al.*, 1992b; Liang *et al.*,

1992; Zheng, 1993; Zheng *et al.*, 1993; Yin *et al.*, 1996; Zheng *et al.*, 1998; Ren *et al.*, 2001; Zheng *et al.*, 2002]。记述了于 2008 年采自山东省异爪蝗属 *Euchorthippus* Tarbinsky, 1926 1 新种, 山东异爪蝗 *Euchorthippus shandongensis* sp. nov., 记述如下。模式标本保存于山东农业大学植保学院标本室。

山东异爪蝗, 新种 *Euchorthippus shandongensis* sp.

nov. (图 1~8)

雄性 (图 1~6) 体小型。头顶宽短, 顶钝, 复眼前缘头顶最大宽度为头顶长的 1.5 倍。颜面倾斜, 颜面隆起明显, 具纵沟, 中眼之下缩狭, 往下明显宽大。头侧窝长方形, 长为宽的 3.2 倍。复眼椭圆型, 其垂直直径为水平直径的 2 倍, 为眼下沟长的 2.4 倍。触角丝状, 细长, 明显超过前胸背板的后缘, 中段一节长为宽的 2.3 倍。前胸背板前缘较直, 后缘呈弧形突出, 中隆线明显, 被后横沟割断, 后横沟位于中部之后, 沟前区的长度为沟后区长度的 1.2 倍。前胸背板侧隆线在沟前区呈钝角形弯曲, 在沟

后区向外开张。中胸腹板中隔长为最小宽度的 1.2 倍。后胸腹板侧叶分开较狭。前翅较长, 明显超过肛上板基部, 缘前脉域近基部明显扩大, 顶端不超过前翅的中部; 肘脉域的最大宽度大于中脉域的最大宽度。后足股节细长, 长为最宽处的 5.6 倍。后足胫节外缘和内缘各具刺 12 个, 缺外端刺。跗节爪间中垫大, 到达爪的端部, 两爪长度不等, 外爪明显长于内爪。鼓膜孔半圆形。下生殖板短锥状, 较短, 侧面观长为宽的 1.5 倍, 顶端钝圆。阳茎基背片猫状突端部略细, 弓形深, 两侧下端具尖突。



图 1~8 山东异爪蝗, 新种 *Euchorthippus shandongensis* sp. nov.

1, 3~4. ♂ 7. ♀ 1. 侧面 (lateral view) 2. 头侧窝 (fastigial foveolae) 3. 颜面隆起 (frontal ridge) 4. 下生殖板 (subgenital plate) 5. 阳茎基背片 (epiphallus) 6. 爪 (claw) 7. 侧面 (lateral view) 8. 产卵瓣 (ovipositor valves)

雌性 (图 7~8) 近似雄性, 体型较大。触角丝状, 基部的触角节略宽大, 较短, 略超过前胸背板的后缘, 中段一节长为宽的 1.8 倍。前翅较短, 超过后足股节的中部。中胸腹板中隔长为最小宽度的 1.1 倍。下生殖板后缘中央呈弧形突出。产卵瓣细长, 边缘光滑, 顶端弯曲, 呈钩状。

体通常暗褐色。前翅黄褐色。后足股节外侧黄褐色, 内侧红褐色。后足胫节淡黄色。后足跗节淡黄色。

体长: ♂ 15.0 ~ 16.5 mm, ♀ 22.0 ~ 22.3 mm。前翅长: ♂ 9.0 ~ 9.8 mm, ♀ 12.0 ~ 12.5 mm。后足股节长: ♂ 10.9 ~ 11.2 mm, ♀ 13.8 ~ 14.8 mm。

正模 ♂, 山东昆嵛山 (37°14'N, 121°46'E; 海拔 230 ~ 923 m), 2008-09-26, 肖云丽、李新江、叶保华采。副模: 4 ♂♂, 2 ♀♀, 记录同正模。模式标本保存于山东农业大学植保学院标本室。

新种同素色异爪蝗 *Euchorthippus unicolor* (Ikonnikov, 1913) 近似, 其区别特征见表 1。

词源: 新种种名源自新种模式标本产地。

表 1 山东异爪蝗和素色异爪蝗特征比较

Table 1. Comparison of *Euchorthippus shandongensis* sp. nov. and *Euchorthippus unicolor*.

	山东异爪蝗, 新种 <i>Euchorthippus shandongensis</i> sp. nov.	素色异爪蝗 <i>Euchorthippus unicolor</i>
头侧窝 Fistigial foveolae	长为宽的 3.2 倍 Length is 3.2 times width	长为宽的 2.5 倍 Length is 2.5 times width
颜面隆起 Frontal ridge	中眼之下缩狭, 往下明显宽大 Below the median ocellus narrow, downward broaden distinctly	近乎平行 Nearly parallel
雄性前翅 Tegmina of male	较长, 明显超过肛上板基部 Longer, extending over the base of epiproct distinctly	较短, 到达肛上板基部 Shorter, reaching the base of epiproct
雄性下生殖板 Subgenital plate of male	较短, 侧面观长为宽的 1.5 倍 Shorter, length is 1.5 times width in lateral view	较长, 侧面观长为宽的 2.3 倍 Longer, length 2.3 times width in lateral view
阴茎基背片 Epiphallus	弓形深, 两侧下端具尖突 Arc deep, lower apex with acute tuber on both side	弓形浅, 两侧下端不具尖突 Arc shallow, lower apex without acute tuber on both side

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